California Data Exchange Center

Hydrologic Database System



webmaster@flood.water.ca.gov http://cdec.water.ca.gov

Organization

Division of Flood Management

Hydrology and Flood Operations

Hydrology Branch

California Data Exchange Center

Forecasting Section

Snow Surveys Section

State Meteorologist

Flood Operations
Branch

Flood Project
Inspection Section

State-Federal Flood Operations Center

Eureka Flood Center

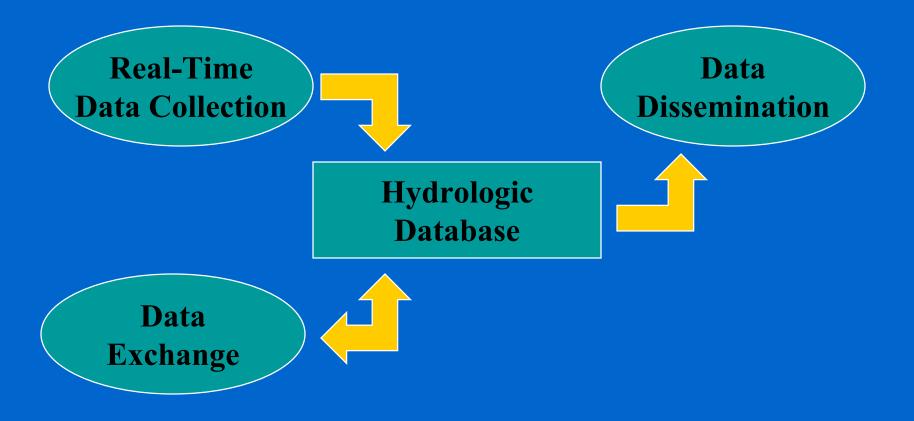
Objectives

- Collect and disseminate hydrologic and weather information
- Provide a centralized database for user access
- Provide an early flood warning system

Basic Uses of Database

- Early flood warning system
- Monitoring river levels
- Water supply forecasting
- Planning reservoir releases
- Monitor water quality in the Delta
- Recreational use of water ways

Essential Functions



Real-Time Data Collection

- Satellite transmissions from remote data stations (513 stations)
- Microwave radio transmissions from remote data stations (123 stations)

Data Exchange

- Electronic transfer of information between Federal, State and public agencies
- Data from 130 stations are received and stored in centralized database
- Other information includes summary reports and real-time images

Data Exchange Agencies

- DWR-Operations and Maintenance (O&M)
- National Weather Service (NWS)
- U.S. Bureau of Reclamation (USBR)
- U.S. Army Corps of Engineers (USACE)
- Sacramento Municipal Utility District (SMUD)

Data Exchange Agencies

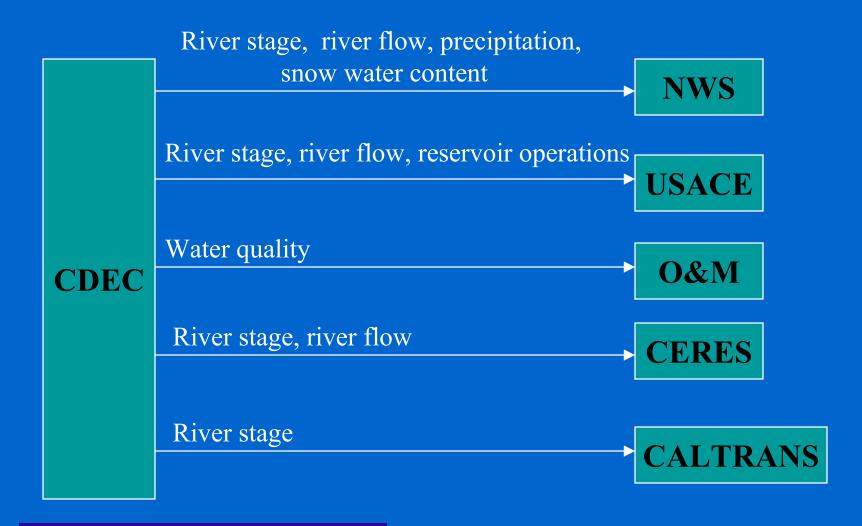
- East Bay Municipal Utility District (EBMUD)
- California Environmental Resources Evaluation System (CERES)
- California Department of Transportation (CALTRANS)

Data Exchange (Receive Data)

Weather forecasts, river bulletins, full weather data precipitation maps, river stage maps

NWS Reservoir operations, reservoir summary reports **USBR** Reservoir operations, reservoir summary reports, precipitation, snow water content **USACE** Reservoir operations, precipitation, **CDEC SMUD** snow water content, air temperature State Water Project operations O&M Reservoir operations

Data Exchange (Send Data)



Data Dissemination

- Government and public access
- Internet Web Server
 - (http://cdec.water.ca.gov)
- Intranet Web Server
 - (http://cdec4gov.water.ca.gov)
- Ability to display data in various ways: plots, pictures, photos, maps, etc.

Data Dissemination

Database Management

Website **Development**

Application Development

Data Analysis



Water Supply Forecasting

River/Flood Forecasting

Flood Operations

Snow Pack Surveys



Tabular Data

Graphs, Charts

Maps

Images, Photos





